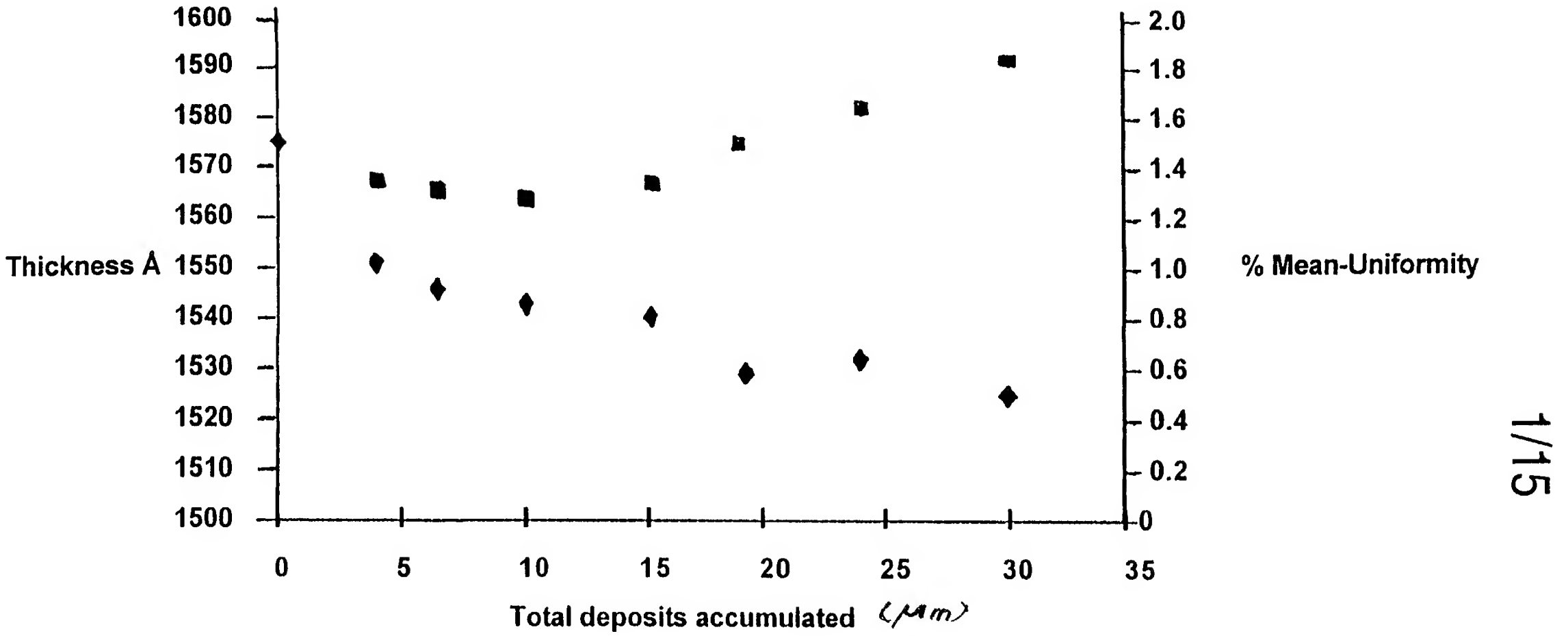
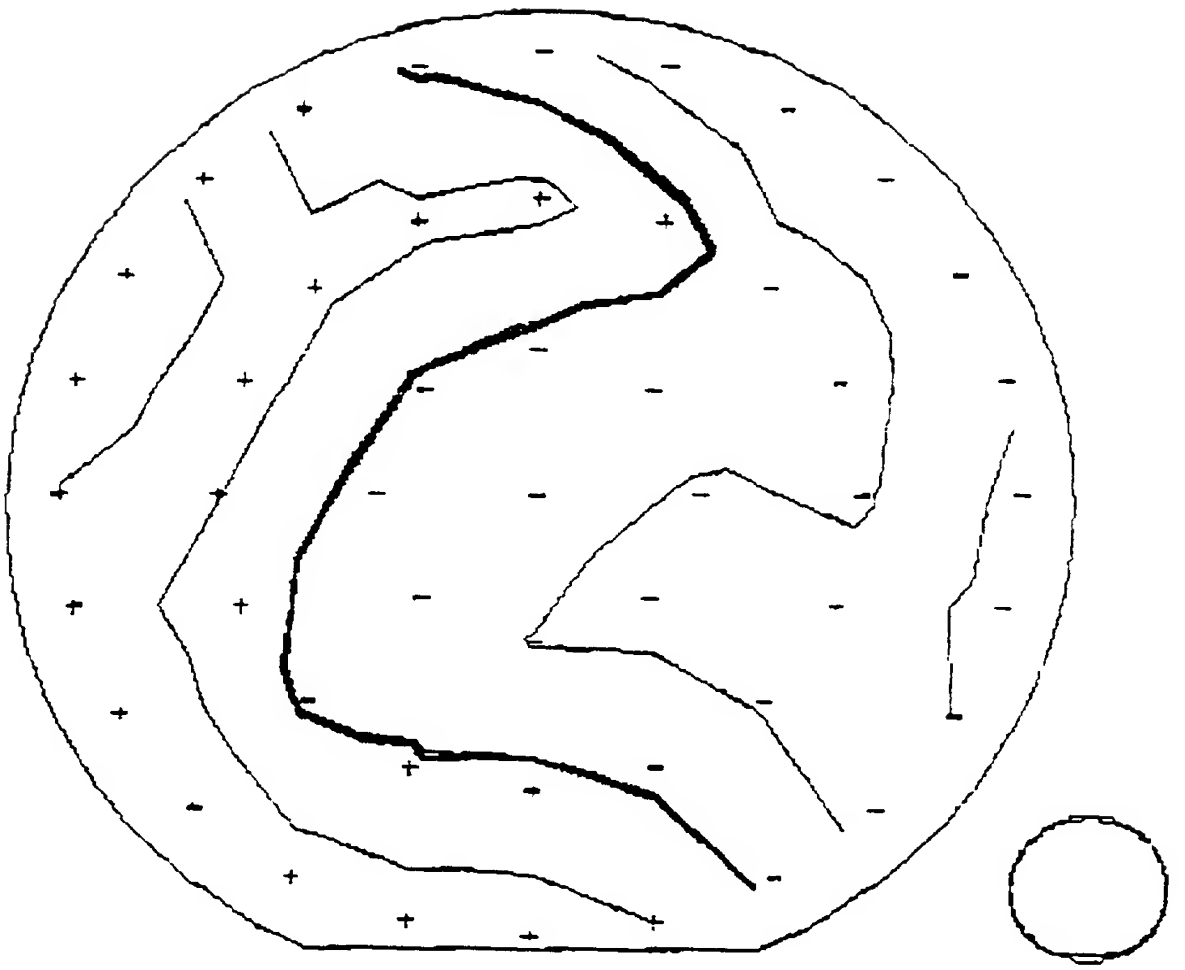
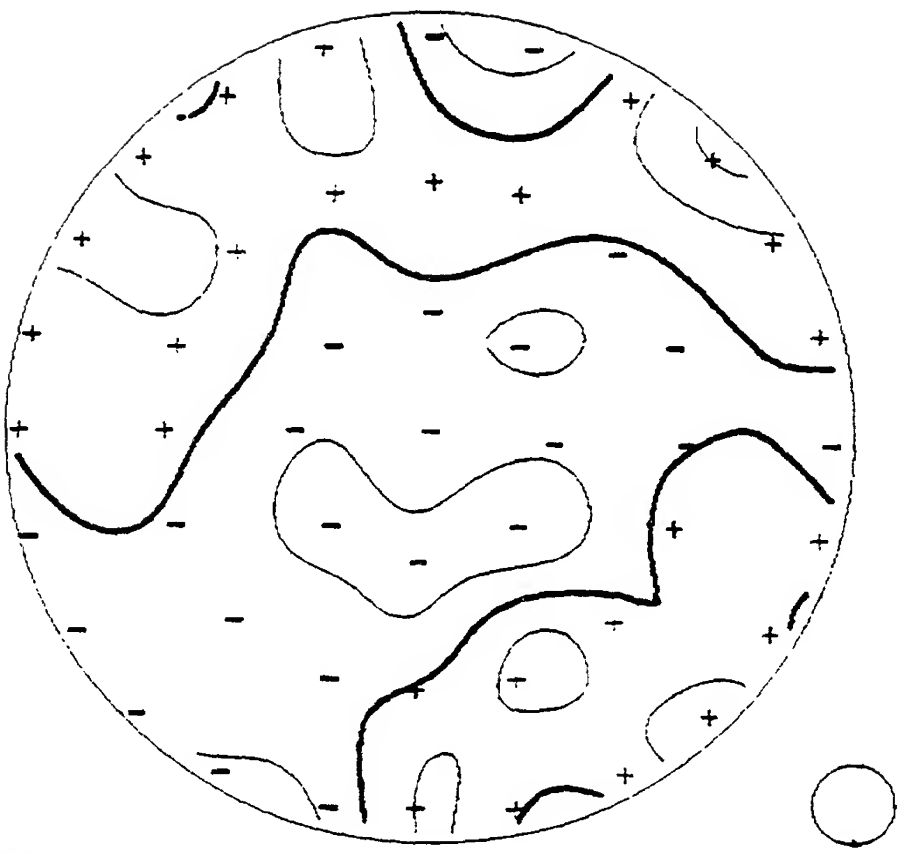

(730C Heater 200Torr 70sccm SiH4; Std Pplate)
Thickness Å
1600
1590
1580
1570
1560
1550
1540
1530
1520
1510
1500
% Mean-Uniformity
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
0
5
10
15
20
25
30
35
Total deposits accumulated (μm)
Particle adders
♦ Thickness as dep
■ Thick N/U as dep

FIG.1



MEAN	1138.6		WAFER DIAM	200.00
STD DEV	15.597	1.370%	TEST DIAM	194.00
MINIMUM	1111.1		TEMPLATE MAP	49 SITE
MAXIMUM	1172.4		CONTOUR DISP	STD
# SITES/GOOD	49/49		INTERVAL	1.000
SUBSTRATE	50MM (275 μ) Si		LAYER 2 FILM	POLY Si
SORTING SIGMA	3.0		MEAN-TARGET	0.000
CORRELATION	* NONE		WARNING	0.000
UNITS	ANGSTROMS		SPEC	0.000

FIG.2



- • GOF Error
- ▲ Sigma Error
- ■ Meausrement Error
- – Below Calculated Mean
- \+ Above Calculated Mean

Wafer Diameter	200 mm
Edge Exclusion	3.000 mm
Type/Pattern	Polar/49 Site Map
# Sites/Good	49/49
Measurement	2nd Thickness
Mean	1318.29 Å
Std. Deviation	10.5104 Å / 0.797%
Minimum	1300.49 Å
Maximum	1341.45 Å
Range	40.95

Limits:	Percent
Mean Target	0.00 Å
U/L Control	20.0%/20.0%
U/L Warning	5.0%/5.0%
U/L Sigma	3.00/3.00
Stdv Control	1.000
Contour Display	Percent
Interval	11.0962
Film Stack	Ox/aSi/Ox-T, T&n&k, T Copy
Layer 3	Themal SiO2
Layer 2	# Amorphous Si
Layer 1	Themal SiO2
Substrate	Silicon

FIG.3

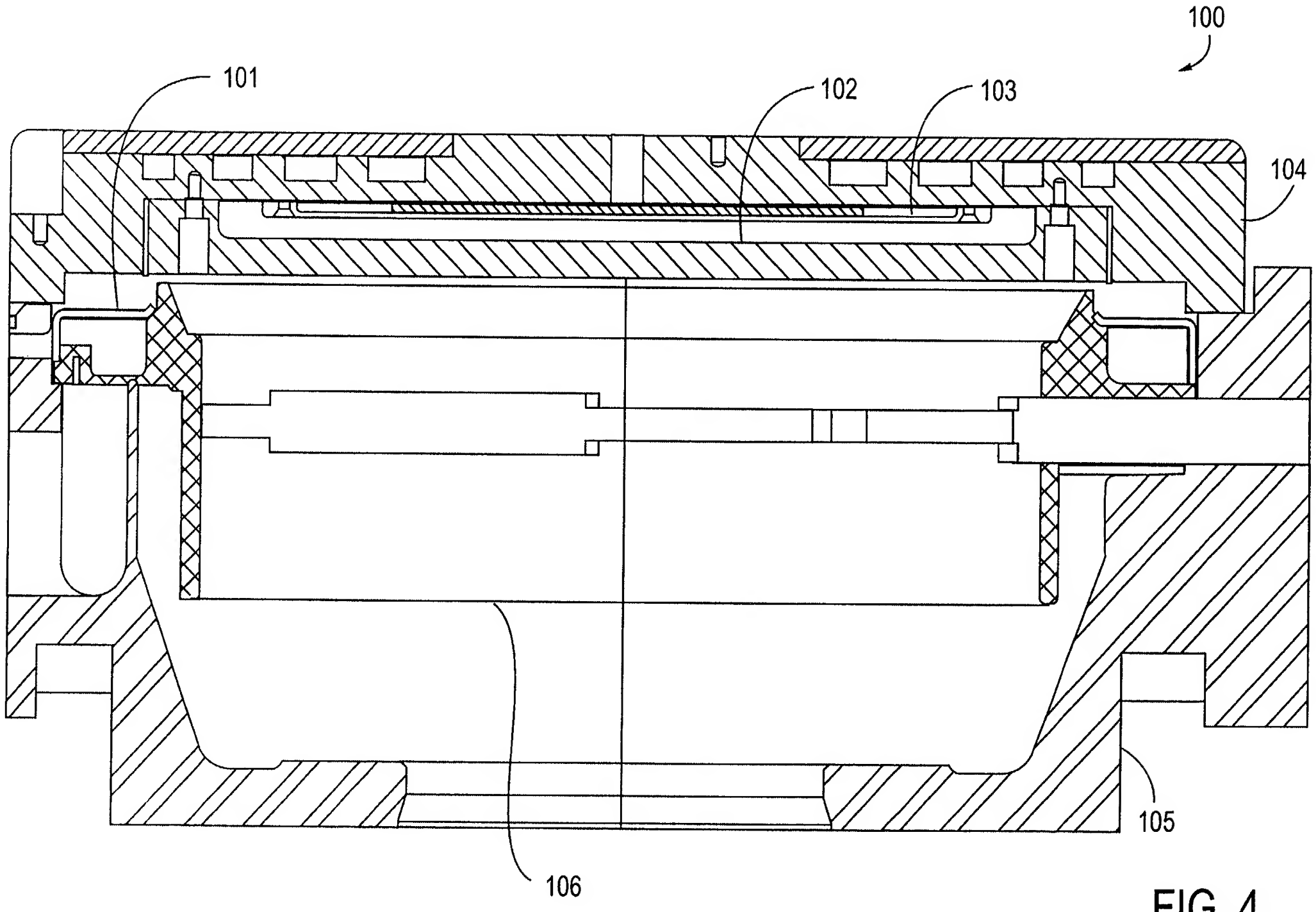


FIG. 4

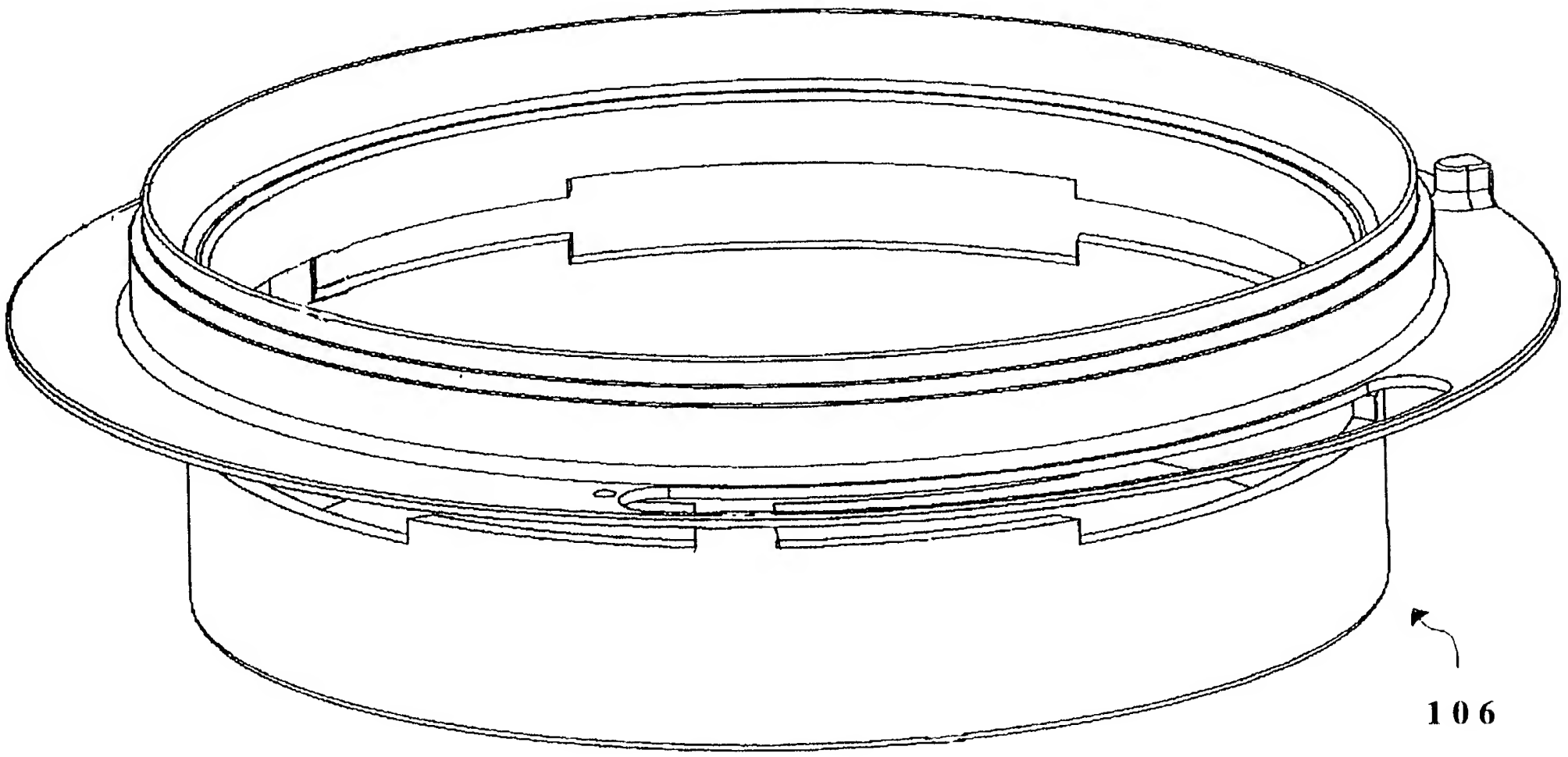


FIG.5

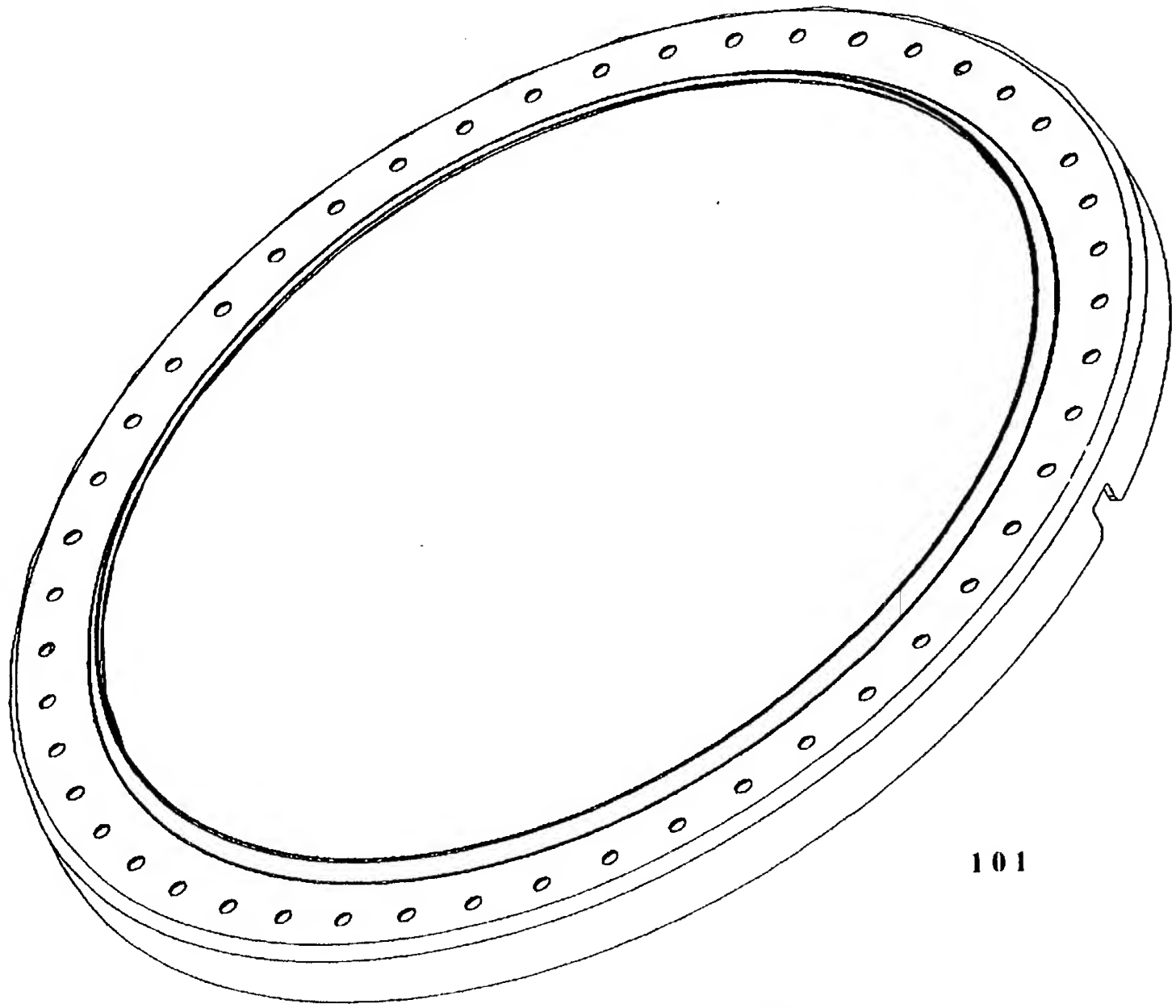


FIG.6

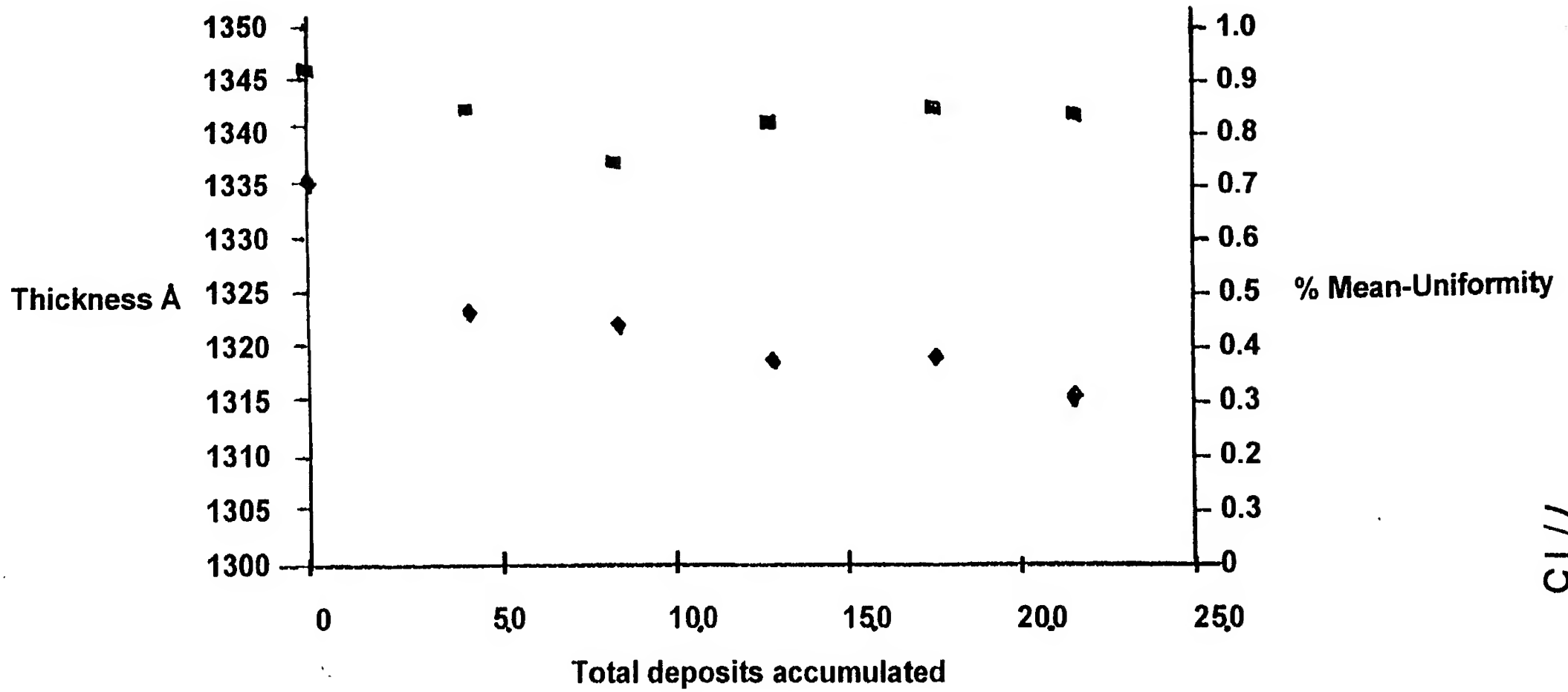

1350
1345
1340
1335
1330
1325
1320
1315
1310
1305
1300
Thickness A
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.3
0
% Mean-Uniformity
0
5.0
10.0
15.0
20.0
25.0
Total deposits accumulated
Particle adders
♦ Thickness as dep
■ Thick N/U as dep

FIG.7

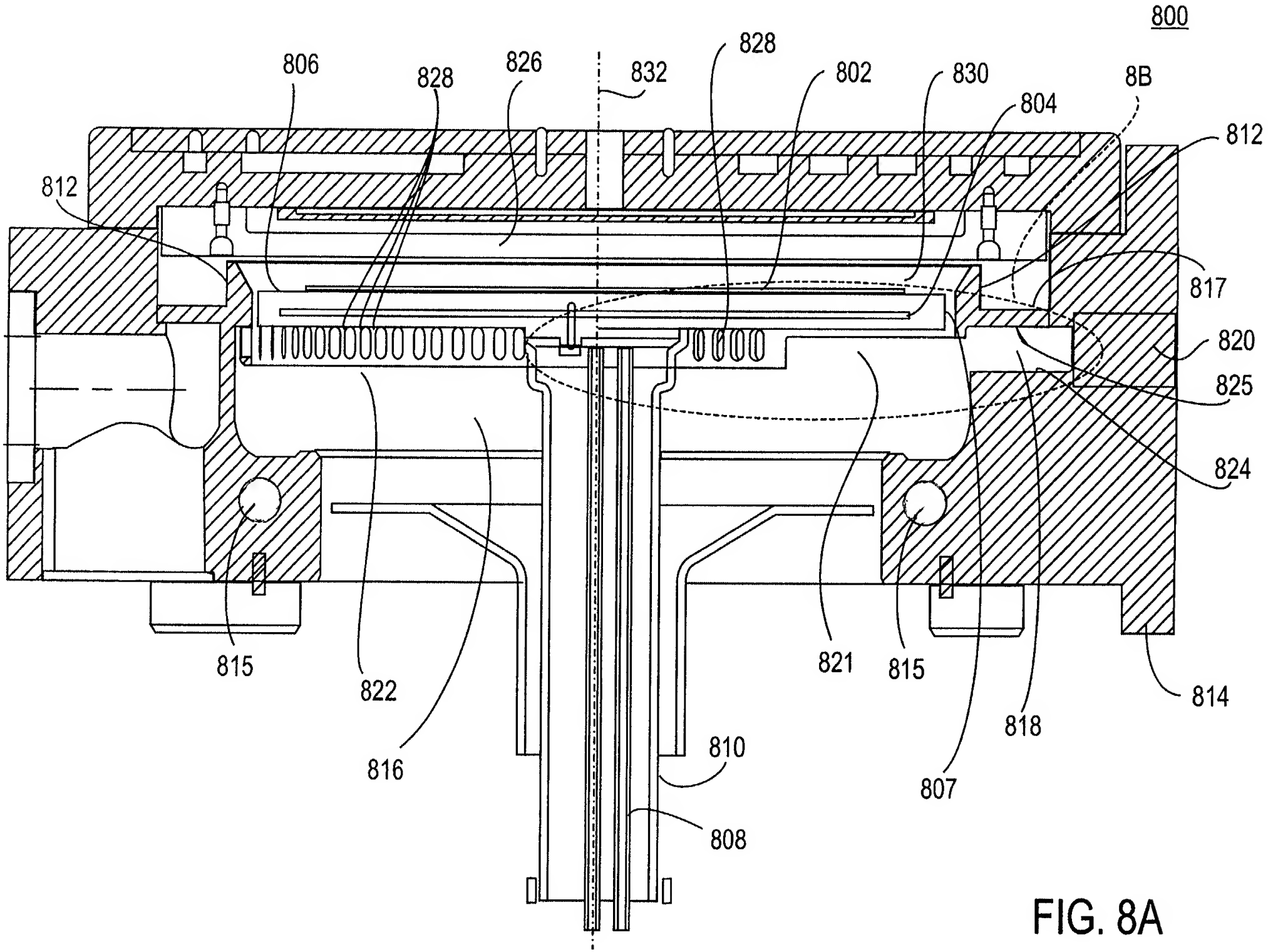

800
806
828
826
832
828
802
830
804
8B
812
812
817
820
825
824
815
822
816
821
815
818
814
810
807
808

FIG. 8A

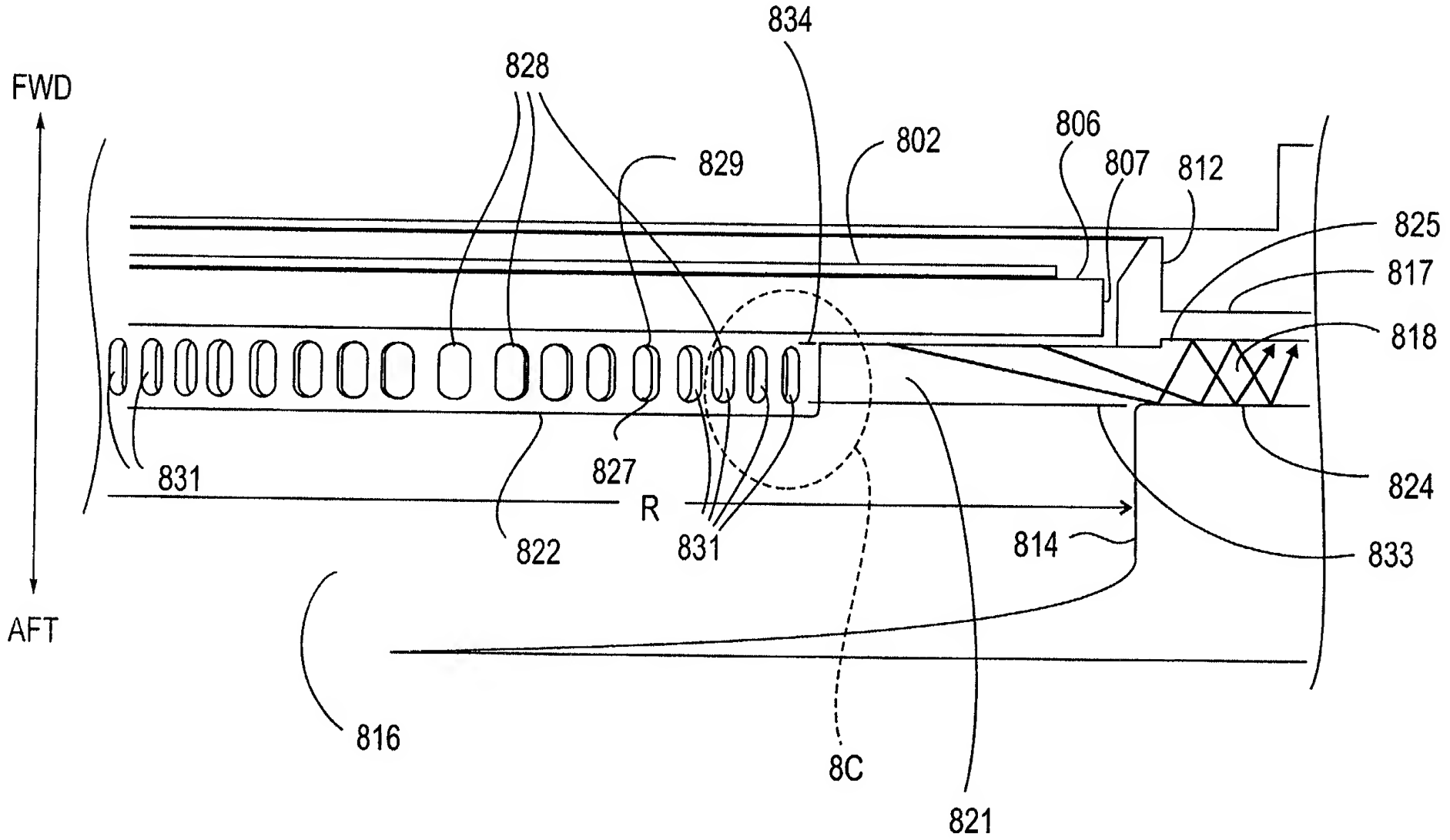

FWD
AFT
828
834
829
802
806
807
812
825
817
818
831
827
R
822
831
824
814
833
816
8C
821

FIG. 8B

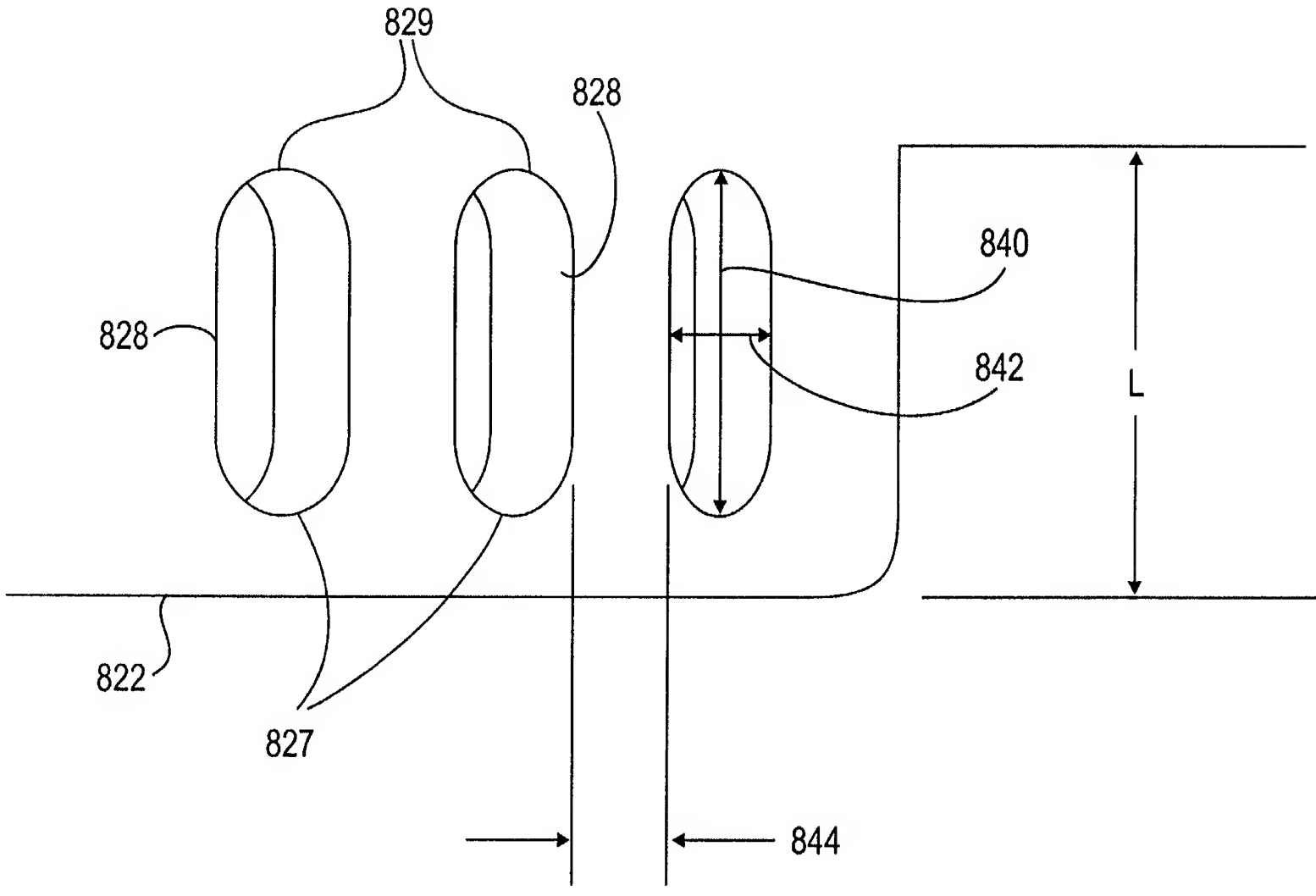


FIG. 8C

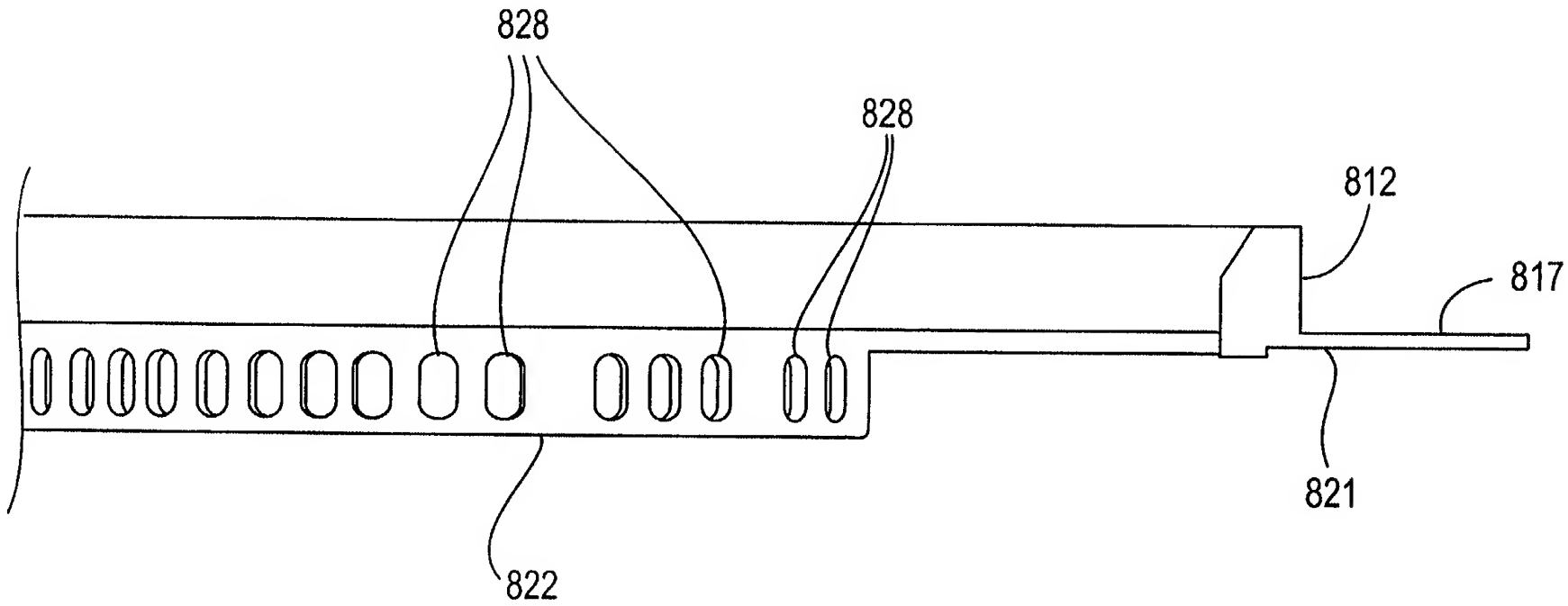


FIG. 8D

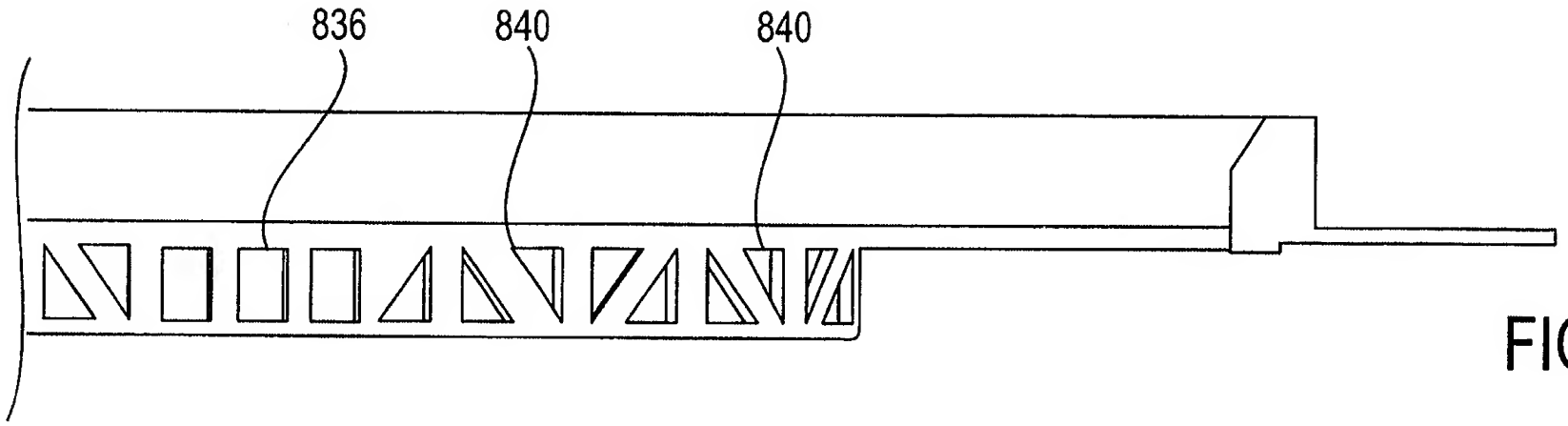


FIG. 8E

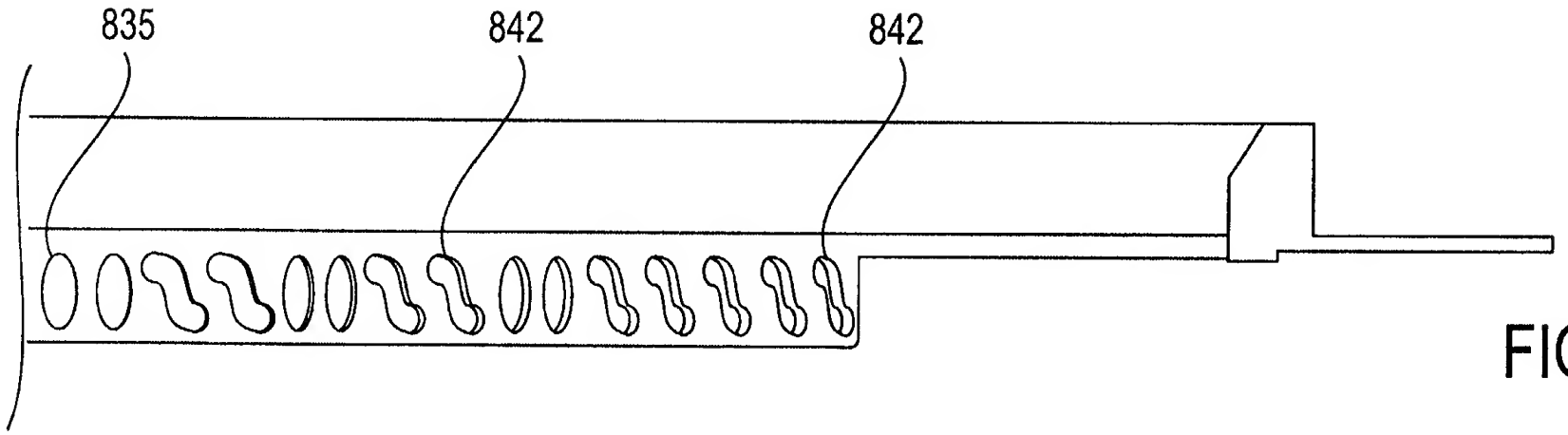


FIG. 8F

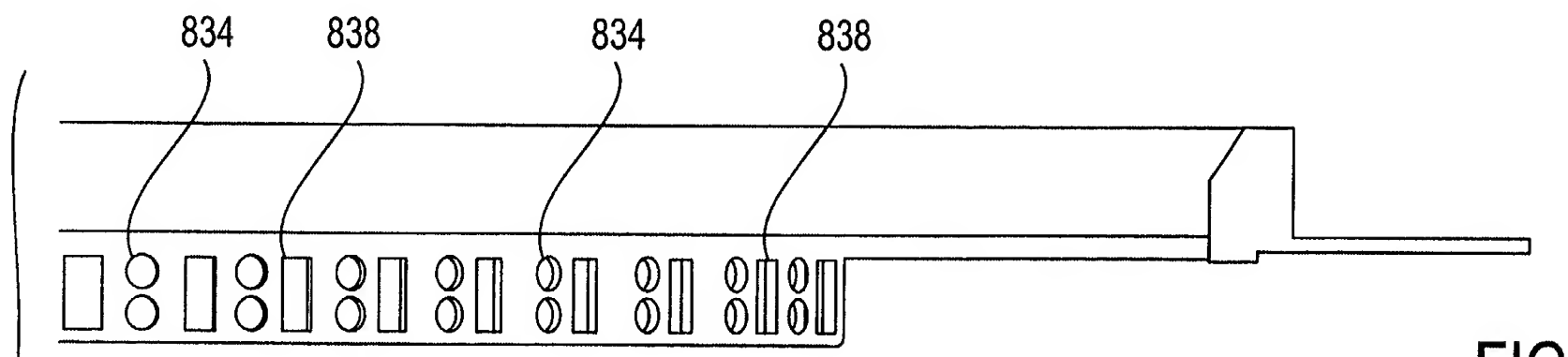


FIG. 8G

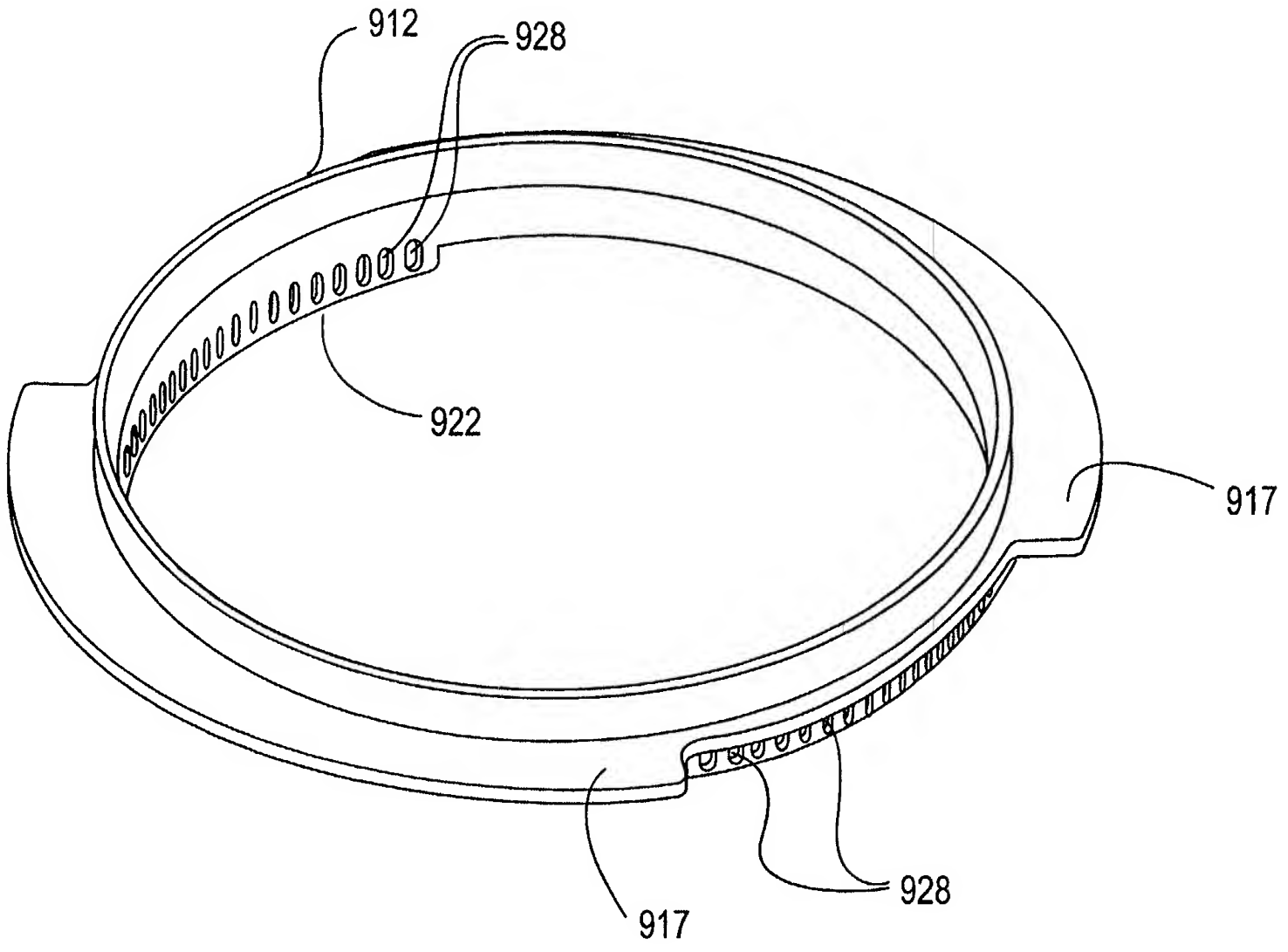


FIG. 9A

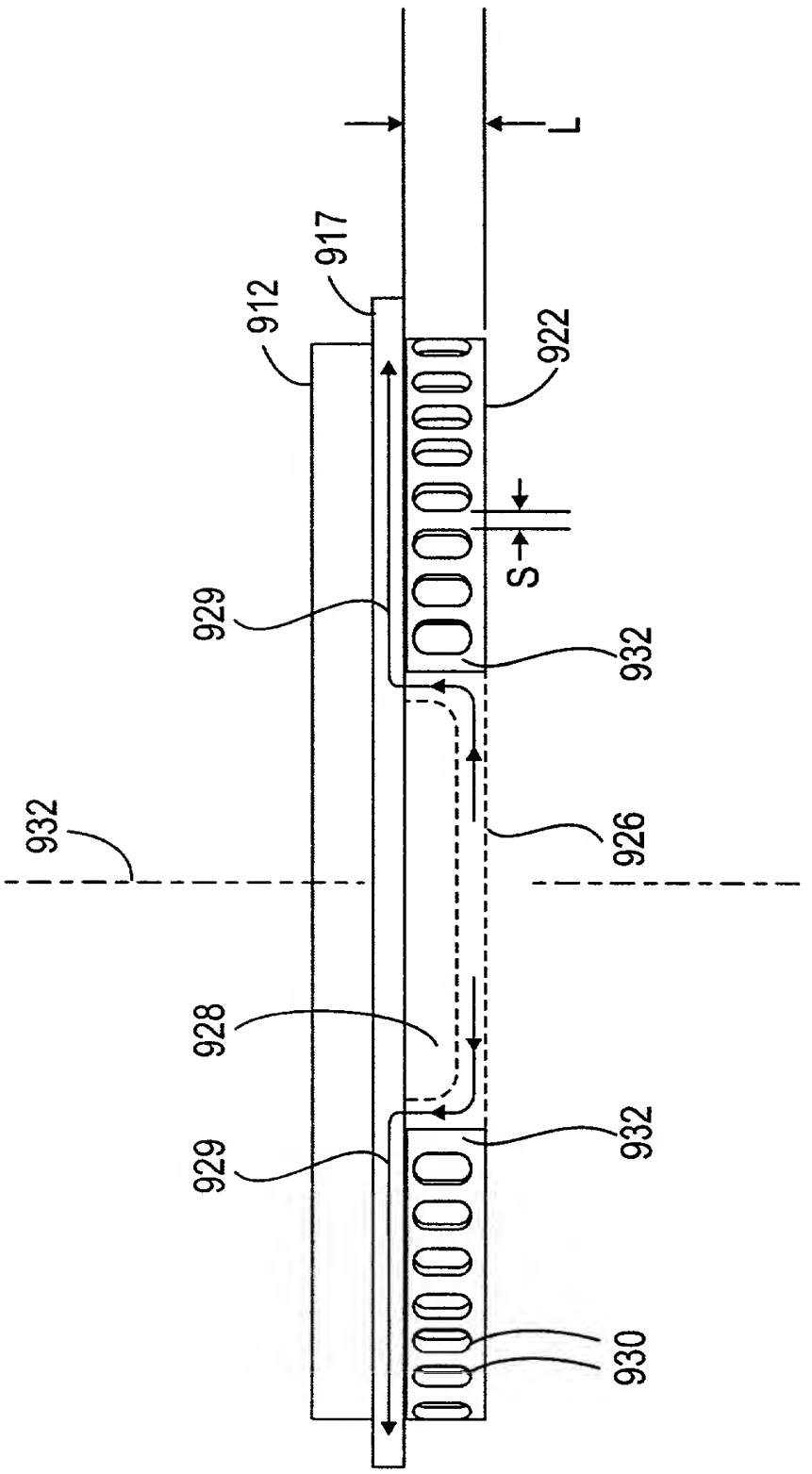


FIG. 9B

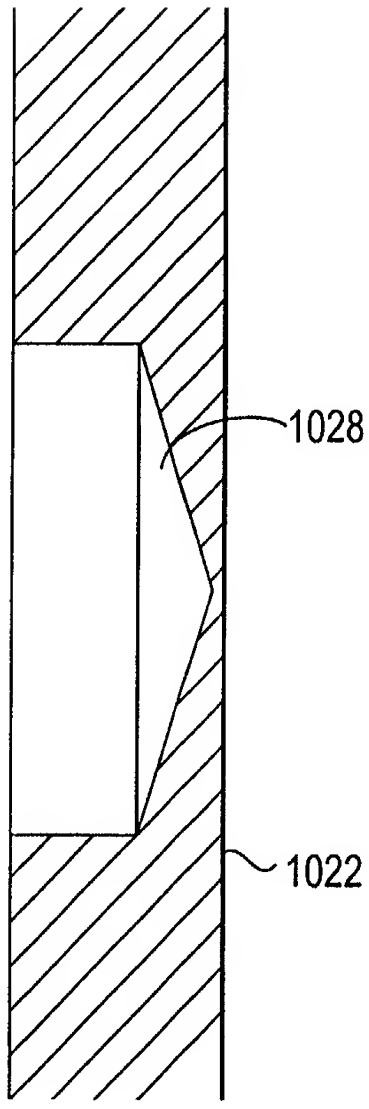


FIG. 10A

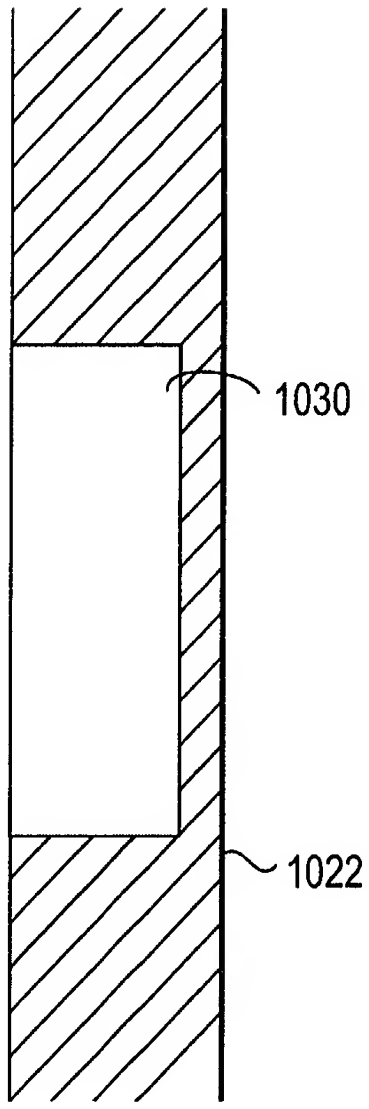


FIG. 10B

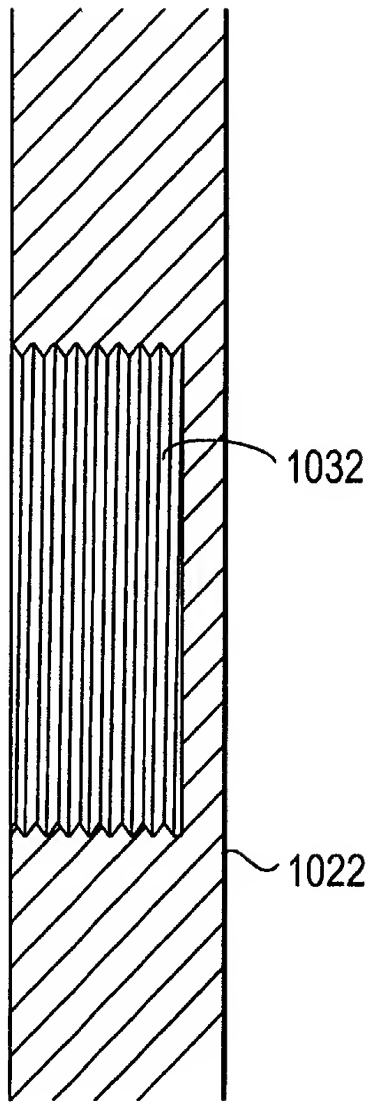


FIG. 10C